SEQUENCE LISTING

(1) GENERAL INFORMATION:

(i) APPLICANT: GREAVES, DAVID ROBERT

(ii) TITLE OF INVENTION: GENE EXPRESSION IN MONOCYTES AND MACROPHAGES

(iii) NUMBER OF SEQUENCES: 6

(iv) CORRESPONDENCE ADDRESS:
(A) ADDRESSEE: NIXON & VANDERHYE P.C.
(B) STREET: 1100 NORTH GLEBE ROAD
(C) CITY: ARLINGTON
(D) STATE: VIRGINIA
(E) COUNTRY: U.S.A.
(F) ZIP: 22201-4714

(v) COMPUTER READABLE FORM:
(A) MEDIUM TYPE: Floppy disk
(B) COMPUTER: IBM PC compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)

(vi) CURRENT APPLICATION DATA:
(A) APPLICATION NUMBER: US 09/171,802
(B) FILING DATE: 26-OCT-1998
(C) CLASSIFICATION:

(vii) PRIOR APPLICATION DATA:
(A) APPLICATION NUMBER: PCT/GB97/01209
(B) FILING DATE: 02-MAY-1997
(C) CLASSIFICATION:

(vii) PRIOR APPLICATION DATA:
(A) APPLICATION NUMBER: GB 9609261.4
(B) FILING DATE: 02-MAY-1996
(C) CLASSIFICATION:

(viii) ATTORNEY/AGENT INFORMATION:
(A) NAME: SADOFF, B. J.
(B) REGISTRATION NUMBER: 36,663
(C) REFERENCE/DOCKET NUMBER: 1430-202

(ix) TELECOMMUNICATION INFORMATION:
(A) TELEPHONE: (703) 816-4000
(B) TELEFAX: (703) 816-4100

(2) INFORMATION FOR SEQ ID NO: 1:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 2130 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

TGTCCTGGAA CCCAGGTGCC TACCTGGTCT GCTGCATATT TGTTTTCTCT TCCAGCATGG 60

AGATATGGNA CCAAAAGGAA CGAGTGCTCA GAGTTTTGAT TACCANTGAC CTGCTGGTGA 120

GTAGAGGGAA CTGATAGCAA AGGCAGAAGG GAGGATCCAA GGTGATTCCC TCTCCAAGGC 180

AAGTTCGGAA AGTAGCAGCT TGGAATAGAA TCTGGCATGC CTAAGGCCTT TGGGGAACTG 240

GGATGCTTAT TTCCTCTGCC TTCCTTGGCT GCCCACATGG ATGCCTAAGT GTCTTCCCTC 300

CGGGATAGAG TGTCCTCCGT GCACATGCTG AAGAGTTGTC TTTCTTGACG TAGGCCAGAG 360

GCATTGATGT GCAGCAGGTT TCTTTAGTCA TCAACTATGA CCTTCCCACC AACAGGGAAA 420

ACTATATCCA CAGGTAAGCG TAGATCTGGA ACATTCCCAN ACCCTTTCAC ACCTGGCCCT 480

CCCTGGGCTT AAAGCTCCTG ATATTCCTCA TCCCCTTCCT TGTTTTCCAG AATCGGTCGA 540

GGTGGACGGT TTGGCCGTAA AGGTGTGGCT ATTAACATGG TGACAGAAGA AGACAAGAGG 600

AYTCTTCGAG ACATTGAGAC CTTCTACAAC ACCTCCATTG AGGAAATGCC CCTCAATGTT 660

GCTGACCTCA TCTGAGGGGC TGTCCTGCCA CCCASCCCCA GCCASGGCTC AAKYTCTGGG 720

GGCTGAGGAK CWGCAGGAGG GGGGAGGGAA GGGAGCCAAG GGATGGACAT CTTGTCATTT 780

TTTTTTCTTT GAATAAATGT CACTTTTTGA GGCAAAAGAA GGAACCGTGA ACATTTTAGA 840

CACCCTTTTC TTTGGGGTAG GCTCTTGCCC CAGGCGCCGG CTCTTCTCCC AAAAAAAAAA 900

AAAAAACACT AATCCATTTC CCTAACCTAG TAACCTCCAG ATCCCAGAGG CTCTCCTCAC 960

CTCAGCTGAG CTCCTTTGAA AGTGATTCAA GGGACTATGT CACTCAGCCT CATTTGCTGG 1020

ACCAAATCTG GAGGGAGAAC CCCTAAAACC CCTAAGTGAG GTTGCCCAGG GGGTTGTCCC 1080

CAGGTGGGGG GAAGCAGGGG AGAGAAAATG GTAGCCATTT TTACATTGTT TTGTATAGTA 1140

TTTATTGATT CAGGAAACAA ACACAAAATT CTGAATAAAA TGACTTGGAA ACTGCCTGTT 1200

TGGGCTTCTC ATTTCTTACC TCCCCTTCCC TCTCCCACCT GMTACTGGGT GCATCTCTGC 1260

TCCCCCCTTC CCCAGCAGAT GGTTACCTTT GGGCTGTTGC TTTCTTGTCA CCATCTGAGT 1320

TCTCAGACGC TGGAAAGCCA TGTTCTCGGC TCTGTGAATG ACAATGCTGA CTGGAGTGCT 1380

GCCCCTCTGT AAAGGGCTGG GTGTGGATGG TCACAAGCCC TTCACATGCY TCAGCCAAGA 1440

GGAAGTAGTA CAGGGGTCAG CCCAGAGGTC CAGGGGAAAG GAGTGGAAAC CGATTTCCCC 1500

ACCAAGGGAG GGGCCTGTAC CTCAGCTGTT CCCATAGCTA CTTGCCACAA CTGCCAAGCA 1560

AGTTTCGCTG AGTTTGACAC ATGGATCCCT GTGGATCAAC TGCCCTAGGA CTCCGTTTGC 1620

ACCCATGTGA CACTGTTGAC TTTGCCCTGA CGAAGCAGGG CCAACAGTCC CCTAACTTAA 1680

TTACAAAAAC TAATGACTAA GAGAGAGGTG GCTAGAGCTG AGGCCCCTGA GTCAGGCTGT 1740

GGGTGGGATC ATCTCCAGTA CAGGAAGTGA GACTTTCATT TCCTCCTTTC CAAGAGAGGG 1800

CTGAGGGAGC AGGGTTGAGC AACTGGTGCA GACAGCCTAG CTGGACTTTG GGTGAGGCGG 1860

TTCAGCCATG AGGCTGGCTG TGCTTTTCTC GGGGGCCCTG CTGGGGCTAC TGGCAGGTAA 1920

GGAGGAAGGA GGCTGAGGGG AGGGGGCCCC TGGGAGGGAG CCTGCCCTGG GTTGCTAACC 1980

ATCTCCTCTC TGCCAAAAGC CCAGGGGACA GGGAATGACT GTCCTCACAA AAAATCAGCT 2040

ACTTTGCTGC CATCCTTCAC GGTGACACCC ACGGTTACAG AGAGCACTGG AACAACCAGC 2100

CACAGGACTA CCAAGAGCCA CAAAACCACC 2130

(2) INFORMATION FOR SEQ ID NO: 2:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 194 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

TTCCAAGAGA GGGCTGAGGG AGCAGGGTTG AGCAACTGGT GCAGACAGCC TAGCTGGACT 60

TTGGGTGAGG CGGTTCAGCC AGGAATCCTG CTGGGGCTAC TGGCAGGTAA GGAGGAAGGA 120

GGCTGAGGGG AGGGGGCCCC TGGGAGGGAG CCTGCCCTGG GTTGCTAACC ATCTCCTCTC 180

TGCCAAAAGC CCAG 194

(2) INFORMATION FOR SEQ ID NO: 3:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 6959 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

AATTCGGTTC TCCAATCCCC TGGGTCACTT TGCTCTTGTG CACGCTTTCC AGTCTTTCAG 60

CGTAAGCCAG AGTCATTCCC AAGGATGCTG GTTTCTCTCT GGGGGAAGAG CTGCTCTGTG 120

ATGGAGCCCA TGCGTGTCAT CTGAGCCTCT GGCTTCCCTG CCAGTGCAGC CCTGGCAGTG 180

TCCTACTTCC CAGGGCTGTT GTCTGCCTGG CGGGAAGGTC CTGGGCAAAG GATCAGTCTT 240

TGTACTCTGA GAGCAGACTA CTTGGCTCCT CTCTGTTTTT TATCAGCGAA GTTGGATATA 300

TCTCTCCCAC ATTTCCCTAA TCATATGCTA TATATTGGCT TTTTTTTTCT TCTCTAGCCC 360

CCAAATACAT CAAGATGTTT GTACTGGATG AAGCTGACGA AATGTTAAGC CGTGGATTCA 420

AGGACCAGAT CTATGACATA TTCCAAAAGC TCAACAGCAA CACCCAGGTG AGGGCAGTCT 480

TGCTTGAATA GCTAATGATT CTTGAAAAAT AGTAAGTGCC AGGGGAAACC AAATACTGGA 540

TTCTTGAGCC TTTTTATGCA TCTGCTTCAG TTTTAGGTGT GGCTAGGGAA GGGAGCAGGC 600

CTCAGGAAGG AACCAGCACT CTAAGACTGG CCTTTTTTTC CACTAGGTAG TTTTGCTGTC 660

AGCCACAATG CCTTCTGATG TGCTTGAGGT GACCAAGAAG TTCATGAGGG ACCCCATTCG 720

GATTCTTGTC AAGAAGGAAG AGTTGACCCT GGAGGGTATC CGCCAGTTCT ACATCAACGT 780

GGAACGAGAG GTGGGGCCCA GTGCAGGAGG CGGGCCTGGT AGTGAGTTGT TGGGTATAGC 840

CCCTGACTGA TTTTTGTCCC CCAACCTCCA GGAGTGGAAG CTGGACACAC TATGTGACTT 900

GTATGAAACC CTGACCATCA CCCAGGCAGT CATCTTCATC AACACCCGGA GGAAGGTGGA 960

CTGGCTCACC GAGAAGATGC ATGCTCGAGA TTTCACTGTA TCCGCCATGG TGTGTTTGCC 1020

CGCTGCCAGC CTGTTGTGGG TCTGCCCGTC AGAAGTGTCC TACTTGAAGC CAGGGTTCCT 1080

GGAACCCAGG TGCCTACCTG GTCTGCTGCA TATTTGTTTT CTCTTCCAGC ATGGAGATAT 1140

GGACCAAAAG GAACGAGACG TGATTATGAG GGAGTTTCGT TCTGGCTCTA GCAGAGTTTT 1200

GATTACCACT GACCTGCTGG TGAGTAGAGG GAACTGATAG CAAAGGCAGA AGGGAGGATC 1260

CAAGGTGATT CCCTCTCCAA GGGGACATCA GTGCCTCTCA GGAAAGTAGC AGCTTGGAAT 1320

AGAATCTGGC ATGCCTAAGG CCTTTGGGGA ACTGGGATGC TTATTTCCTC TGCCTTCCTT 1380

GGCTGCCCAC ATGGATGCCT AAGTGTCTTC CCTCCGGGAT AGAGTGTCCT CCGTGCACAT 1440

GCTGAAGAGT TGTCTTTCTT GACGTAGGCC AGAGGCATTG ATGTGCAGCA GGTTTCTTTA 1500

GTCATCAACT ATGACCTTCC CACCAACAGG GAAAACTATA TCCACAGGTA AGCGTAGATC 1560

TGGAACAYTC CCNTACCCNT TCACACCTGG CCCTCCCTGG GCTTAAAGCT CCTGATATTC 1620

CTCATCCCCT TCCTTGTTTT CCAGAATCGG TCGAGGTGGA CGGTTTGGCC GTAAAGGTGT 1680

GGCTATTAAC ATGGTGACAG AAGAAGACAA GAGGANTCTT CGAGACATTG AGACCTTCTA 1740

CAACACCTCC ATTGAGGAAA TGCCCCTCAA TGTTGCTGAC CTCATCTGAG GGGCTGTCCT 1800

GCCACCCASC CCCAGCCAGG GCTCAAAGTC TGGGGGCTGA GGACCTGCAG GAGGGGGGAG 1860

GGAAGGGAGC CAAGGGATGG ACATCTTGTC ATTTTTTTTT CTTTGAATAA ATGTCACTTT 1920

TTGAGGCAAA AGAAGGAACC GTGAACATTT TAGACACCCT TTTCTTTGGG GTAGGCTCTT 1980

GCCCCAGGCG CCGGCTCTTC TCCCAAAAAA AAAAAAAAAA CACTAATCCA TTTCCCTAAC 2040

CTAGTAACCT CCAGATCCCA GAGGCTCTCC TCACCTCAGC TGAGCTCCTT TGAAAGTGAT 2100

TCAAGGGACT ATGTCACTCA GCCTCATTTG CTGGACCAAA TCTGGAGGGA GAACCCCTAA 2160

AACCCCTAAG TGAGGTTGCC CAGGGGGTTG TCCCCAGGTG GGGGGAAGCA GGGGAGAGAA 2220

AATGGTAGCC ATTTTTACAT TGTTTTGTAT AGTATTTATT GATTCAGGAA ACAAACACAA 2280

AATTCTGAAT AAAATGACTT GGAAACTGCC TGTTTGGGCT TCTCATTTCT TACCTCCCCT 2340

TCCCTCTCCC ACCTGCTACT GGGTGCATCT CTGCTCCCCC CTTCCCCAGC AGATGGTTAC 2400

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CGGCTCTGTG AATGACAATG CTGACTGGAG TGCTGCCCCT CTGTAAAGGG CTGGGTGTGG 2520

ATGGTCACAA GCCCCTCACA TGCCTCAGCC AAGAGGAAGT AGTACAGGGG TCAGCCCAGA 2580

GGTCCAGGGG AAAGGAGTGG AAACCGATTT CCCCACCAAG GGAGGGGCCT GTACCTCAGC 2640

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CCCTGTGGAT CAACTGCCCT AGGACTCCGT TTGCACCCAT GTGACACTGT TGACTTTGCC 2760

CTGACGAAGC AGGGCCAACA GTCCCCTAAC TTAATTACAA AAACTAATGA CTAAGAGAGA 2820

GGTGGCTAGA GCTGAGGCCC CTGAGTCAGG CTGTGGGTGG GATCATCTCC AGTACAGGAA 2880

GTGAGACTTT CATTTCCTCC TTTCCAAGAG AGGGCTGAGG GAGCAGGGTT GAGCAACTGG 2940

TGCAGACAGC CTAGCTGGAC TTTGGGTGAG GCGGTTCAGC CATGAGGCTG GCTGTGCTTT 3000

TCTCGGGGGC CCTGCTGGGG CTACTGGCAG GTAAGGAGGA AGGAGGCTGA GGGGAGGGGG 3060

CCCCTGGGAG GGAGCCTGCC CTGGGTTGCT AACCATCTCC TCTCTGCCAA AAGCCCAGGG 3120

GACAGGGAAT GACTGTCCTC ACAAAAAATC AGCTACTTTG CTGCCATCCT TCACGGTGAC 3180

ACCCACGGTT ACAGAGAGCA CTGGAACAAC CAGCCACAGG ACTACCAAGA GCCACAAAAC 3240

CACCACTCAC AGGACAACCA CCACAGGCAC CACCAGCCAC GGACCCACGA CTGCCACTCA 3300

CAACCCCACC ACCACCAGCC ATGGAAACGT CACAGTTCAT CCAACAAGCA ATAGCACTGC 3360

CACCAGCCAG GGACCCTCAA CTGCCACTCA CAGTCCTGCC ACCACTAGTC ATGGAAATGC 3420

CACGGTTCAT CCAACAAGCA ACAGCACTGC CACCAGCCCA GGATTCACCA GTTCTGCCCA 3480

CCCAGAACCA CCTCCACCCT CTCCGAGTCC TAGCCCAACC TCCAAGGAGA CCATTGGAGA 3540

CTACACGTGG ACCAATGGTT CCCAGCCCTG TGTCCACCTC CAAGCCCAGA TTCAGATTCG 3600

AGTCATGTAC ACAACCCAGG GTGGAGGAGA GGTAAAGCTA AAACTGGGGG ATGAGAGGGG 3660

AGGGAGGCAG GACTGGTTAT AGGCTCAGAG GGAAGAAGGA AGAGGGGACA GGNAACCTTG 3720

GCCGGCATCG CATGCAGTCT TGTGACCTTC CAGTCTTTAA CTTCCGCAGG GCTGGGGTAT 3780

CTCTGTNCTG ANCCCCAACA GAACCAAGGT CCAGGGAAGC TGTGGGGGTG CCCATCCCCA 3840

CCTGCTTCTC TCATTCCCCT ATGGACACCT CAGCTTTGGA TTCATGCAGG TATAGCCATG 3900

ACCTCAGTCT CACCCCTCAC TCAGCCTCCC GGCGCCCCTC CCCTCCCAAT CCCACACGCT 3960

ACTCCTTCCT CTGTGGAGAG GGATACCACC TGCGCCTTCC TCTTCGCCCC ACAGGACCTC 4020

CAGCAGAAGG TTGTCTACCT GAGCTACATG GCGGTGGAGT ACAATGTGTC CTTCCCCCAC 4080

GCAGCACGTA AGTAACCTCC TTCCCTTTCT CATTGCTACC ACTAGACGCC AGGGTTCCTG 4140

AAAGGACTAA GCTGGGGCCA GGGAGGTGGA TAGGATCTGA CCCTTCCTCA CTCCTCCAGA 4200

GTGGACATTC TCGGCTCAGA ATGCATCCCT TCGAGATCTC CAAGCACCCC TGGGGCAGAG 4260

CTTCAGTTGC AGCAACTCGA GCATCATTCT TTCACCAGCT GTCCACCTCG ACCTGCTCTC 4320

CCTGAGGCTC CAGGCTGCTC AGCTGCCCCA CACAGGGGTC TTTGGGCAAA GTAAGACCTA 4380

CCTACTCCTT CCCTCCTAGA ATCCTCCCAC TGCACTGAAA ACCCCTTCCC CAGGCCCATA 4440

AGCCACTCAT CTCTCTTCTT AACCCCCCAA ATCTCGCTCT CCCAGCTTGT CATGGCTACA 4500

GGGCAGCTTT CTTTCCATCC TCTACAAGAC TCTGCCAGTT TCCCCCTTTT ATCACTGCTG 4560

AGTCACTGCG GTGAGCTCCT CACCAATCTC CTACTCCCCA GCATCCCCCC ATTCCCTCCT 4620

CCCACCTTTA TCCCAACCAG CACGTCACTG CAAATACCTA CCTGCCCTAT CCTTCCGCCA 4680

GGTTTCTCCT GCCCCAGTGA CCGGTCCATC TTGCTGCCTC TCATCATCGG CCTGATCCTT 4740

CTTGGCCTCC TCGCCCTGGT GCTTATTGCT TTCTGCATCA TCCGGAGACG CCCATCCGCC 4800

TACCAGGCCC TCTGAGCATT TGCTTCAAAC CCCAGGGCAC TGAGGGGGTT GGGGTGTGGT 4860

GGGGGGGTAC CCTTATTTCC TCGACACGCA ACTGGCTCAA AGACAATGTT ATTTTCCTTC 4920

CCTTTCTTGA AGAACAAAAA GAAAGCCGGG CATGACGGCT CATGCCTGTA ATCCCAGCAC 4980

TTTGGGAGGC TGAGGCAGGT GGATCACTGG AGGTCAGGAG TTTGAGACCA GCCTGGCCAA 5040

CATGGTGAAA CCCTGTCTCT ACTAAAAATA CAATTAGCCA GGTGTGGCGG CGTAATCCCA 5100

GCTGGCCTGT AATCCCAGCT ACTTGGGAGG CTGAGGCAGA ACTGCTTGAA CCCAGGAGGT 5160

GGAGGTTGCA GTGAGCCGTC ATCGCGCCAC TGAGCCAAGA GTCGCGCCAC TGCACTCCAG 5220

CCTGGGCGAC AGAGCCAGAC TGTCTCAAAT AAATAAATAT GAGATAATGC AGTCGGGAGA 5280

AGGGAGGGAG AGAATTTTAT TAAATGTGAC GAACTGCCCC CCCCCCCCCC CCCCAGCAGG 5340

AGAGCAGCAA AATTTATGCA AATCTTTGAC GGGGTTTTCC TTGTCCTGCC AGGATTAAAA 5400

GCCATGAGTT TCTTGTCACA TGCCTTTCTA TGCCTTCCAT GGCTGGGTCT CAGGGAGCCG 5460

GAAGCAGCTG CTGAGGAGGG ATGAAAATGT CAGTGTGTGA CGATGCCTCA TGGGTTCACC 5520

CCCCAAAGCC TGGCACAGCT GGTGTTGGGT CTGCCGTGCC TCCCTTCCTT CCTCCTCTTG 5580

GGGCCACTGG CTGCTCCAGT TCCCCATCCG TGGCAAGCCG GTAGAGCCAT TCATCCCCGC 5640

AGCCTTCTTC CTGACCCTCG TACAGTTTCA AATGCAGCAG ACAGCCAAAG CAATGAGTGG 5700

GGGGCTGTGG AACTTCATTC CCAAAGGCAG CGCCAGTGGC TCCTGAGCAA TGAGAATGTC 5760

CTGTCCTGTC CACCATATTC AAGGCCAGCA GAAGAGCCCG ATTAAACCCT CGCAGCGACC 5820

TGGCATGCTC CTATCCCACC TGCAAGGGGT TGAATCAAGA AGGAGCAGTG GGTACTCTGA 5880

CCTCCACTGG GGGCTCCTGG GAACAGCATG CCCCCCACAC GGGGCCACCT GCCAAGCCTA 5940

ACTTCATGCC CCCAGTACTT GAGATGAGGA GTGTCACTCT CAGGACAGCC AAGGTCCAGA 6000

TTCTAGAAAG GACCTCCCAG ATGGCCACAG CCTGCACCAG CAGTGAGCGC CAGTCCCACC 6060

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AGGAGCCCCA GGAGGCTTCC GGCTTCCAAG GCCMAGAGAC TGCCCCACAA GGSAGCCCTC 6180

ACCTGGCAGG GCCCAGCAAG CCCCACCTCT GCCTGCAGAC ATCCGTGTGA CCTTGTAGAC 6240

TTTGGAGGGG GGCCCCAAAG GGCTGATCCA CAGCGGAATG ACGCACGGGT GGGCACCGTG 6300

GGTTGGCGTC CCGGCGGTCG GTAACGAAGC ACAACGCCCC CACCAGGTAG TCCAAGGTGC 6360

CCTTTTCCCC AAGCAGCGCT GMAGGKTCMA TCTGGCCTCG CCGAAGTCTC TGCCCAGCAC 6420

GTGGTGCCCC TCGGGCCAGC GGGGAGGGGG CGAATCCCGG GACTGCTCGC CAGGCCTCGG 6480

CTCCCCGGAG ACTCTTGGGG GTSTGGGCCC CAAGGGTGAT TCAGGTGCTG CCCTTKCCCC 6540

GACCTGGGAT GCTTCCCCCA CGTCTTCTTT TGTTTTAATG TCCCGGGCCC AGCAGTTGCC 6600

GGCGCAATTC ATGYTCCGAG GCCTGAGCCA ACCGGAGGCG AGACAAGCAC AGGGCCCTGC 6660

GCGCAACCCG GCACCTAAGG AGGCCTGCCC GGTGCAGACT CTCCTGCTCC CACCGGCGCC 6720

CTTCCCTCTA GAGACGCTGA GAGAACGGGA GCTAGTAGCG CCCCCACCCA ACGCCACCTC 6780

GGAGACTCCG GCTCCTTCTC TCTCAACTTC GAACAATACA AAGTGTGCTA GGAGAAGACA 6840

AGATGGCGCC CAGCAGGAGG AGCGGAGAAA GGCAGGGGTG TAAATCTGGC TTCCAAACTG 6900

GAAGCGTCAA CAAAGGCGTG GGAGGTCTAA CCGCGCAGGC GTGCAGCTTC GGCAAGCTT 6959

(2) INFORMATION FOR SEQ ID NO: 4:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 1738 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

CTAGCTGGTC TGAGCATCTC TGCCATGCGG CTCCCTGTGT GTCTGATCTT GCTAGGACCG 60

CTTATAGGTA AGGAGAAATG GGAGGTGGGG GAGGGAGGGC TCATGGGCAG GAGCCTGCAC 120

CTGGGTGGCC AACCAATCTC TTACTGAAAG CCCAAGGAAC AGAGGAAGAC TGTCCTCACA 180

AAAAGGCCGT TACTCTCCTG CCATCCTTCA CGATGACACC TACAGCCACA GAAAGCACAG 240

CCAGCCCTAC GACCAGCCAC AGGCCCACCA CCACCAGTCA CGGAAATGTC ACAGTTCACA 300

CCAGCTCCGG ACCCACAACT GTCACTCATA ACCCTGCCAC CACCACCAGT CATGGGAATG 360

CCACAATTTC TCATGCCACA GTTTCTCCCA CCACAAATGG CACTGCTACT AGTCCAAGAT 420

CCTCCACTGT TGGCCCTCAC CCTGGACCAC CTCCACCCTC GCCTAGTCCA AGGTCCAAGG 480

GGGCTCTTGG GAACTACACG TGGGCCAACG GCTCCCATCC TTGTGTTCAG CTCCAAGCCC 540

AAATTCAAAT CCGAATCCTA TACCCAATTC AGGGTGGAAG AAAGGTAAAG CTAAAGTGGG 600

GCTTAAAGAG GGCAAGAGGC AAGTCCTGGG CTCGTTCAGC AGGGAAGAGG AAGAGAAGAG 660

GAGGGGATAA ACTGGATGGA GCATTCTTGT GATTTCAGAC CCACCATTGC ACTTCTACAG 720

GCTTGGGGCA TATCTGTTTT GAATCCCAAC AAAACCAAGG TCCAGGGAGG TTGTGACGGT 780

ACCCATCCCC ACCTGTCTCT CTCATTTCCT TATGGACAGC TTACCTTTGG ATTCAAACAG 840

GTATACAGCT TGAGTTTGTC TCTATCCTCT ATTCTTCCAT ATCCCATACC TGTACCCCCG 900

GAGCCTCTGT TCTTGCTCTG TGGACATGGA TGCCTCTGTC CCTGATGCCT TGAGTCTTTY 960

TGTTCACCTT AAGGACCTAC ATCAGAGCCC GAGTACAGTC TACCTGGACT ACATGGCGGT 1020

GGAATACAAT GTGTCCTTCC CACAGGCAGC ACGTGAGTAA TCTCTTCTCC TTACCACACT 1080

AAAAGTCTAG GCTGGGCGTG CTGGGCTGGT GGGGAGGACT CAGGAGTCAG GACTGGATTT 1140

GACTCTTAAT TACTAATTAC TGCAGAGTGG ACATTCATGG CGCAGAATTC ATCTCTTCGA 1200

GAGCTCCAAG CTCCCTTGGG CCAAAGCTTC TGCTGTGGAA ATGCAAGCAT AGTTCTTTCT 1260

CCAGCTGTTC ACCTTGACCT GCTCTCTCTA AGGCTACAGG CTGCTCAGCT GCCTGACAAG 1320

GGACACTTCG GGCCATGTAA GCCCTACCTA CTTCTTCTTT CCTAGAGCTC TCCCAGTGCT 1380

CTGGAAACCT TCCCCAGAAC TCTTTTTCTA GACCTCCGCC TCCTCTACAA GACTGCCTTA 1440

TTTCCCCTTT GCTGACTGCT CTCACCTATG GGTTGGCTCC TCAGCCTTTC TTCATCCCCT 1500

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AGGGATCCCA TTATTCTGCC AGGTTTCTCT TGCAACCGTG ACCAGTCCCT CTTGCTGCCT 1620

CTCATCATTG GCCTGGTCCT CCTCGGCCTC CTCACCCTGG TGCTCATCGC CTTCTGCATC 1680

ACCCGCAGAC GACAATCAAC CTACCAGCCC CTCTGAGCAT CTGCCCCAGT CCACTGTG 1738

(2) INFORMATION FOR SEQ ID NO: 5:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 27 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:

CCGGAATTCT GCTGGGGCTA CTGGCAG 27

(2) INFORMATION FOR SEQ ID NO: 6:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 29 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:

TGATCTAGAG TCCCCTGGGC TTTTGGCAG